

Draft October 22, 2007 Meeting Notes

JCO Permit Renewal

A description of anticipated renewal permit conditions based on our meeting with USEPA and ASEPA on October 22 and a conference call on October 26 with USEPA is presented below. Although nothing is set in concrete yet, we are reasonably confident that the material below is what we will see in the draft permit that will be released for public notice. We do not expect any significant comments from the public – with the exception of a couple of issues that might be advanced by one or two individuals. It appears unlikely that any comments would become a problem with issuing the permit we now expect.

The following notes are structured, with a few obvious exceptions, as follows:

- A synopsis of the pre-draft permit condition
- A brief synopsis of the discussions with USEPA and ASEPA
- Our current understanding of the resolution of issues discussed

Emphasis indicated by underline is what we believe we have agreement on.

Text in bold red font indicates action items required by us.

- Second level items are not structured as formally as indicated above but are included for completeness.

1. Effluent limitations

pH:

- The pre-draft permit reduced the monitoring from continuous to monthly. Limitations would remain as currently in place but without any relief for occasional exceedances (the existing exceptions would be removed).
- The pre-draft limitations put the canneries at risk for violation caused by occasional low pH values. Ways to avoid this include a mixing zone for pH or limitations as in the existing permit. A mixing zone could only accommodate pH within technology based limitations, which provides only a slight larger range of values. It was noted that the canneries have to add lime to avoid pH excursions below the water quality standard and thus need to monitor pH continuously to meter the required lime input level.
- After some discussion, with significant input from ASEPA, the conclusion was reached that pH limitations should remain as in the existing permit. Continuous monitoring with the same or similar exceptions for occasional excursions.

TSS and Oil & Grease:

- These two parameters are subject to technology based limitations. The limitations are based on production. The proposed limitations in the pre-draft permit are higher (StarKist) or essentially the same (SamPac) as in the existing permit. The monitoring was reduced from once/week to once/month.
- The limitations were based on the maximum monthly production presented for the two years prior to the submission of the permit renewal application (which was submitted in July 2005). We noted that production levels had increased or would be expected to increase in the future. We requested that the limitations be based on maximum anticipated production levels. [In a subsequent email exchange we indicated that maximum production was based on the physical capacity of the plants and that the maximum wastewater flow was designed to accommodate this production.]
- It appears that EPA will consider the request to use maximum production numbers to derive the limitations. We need to provide EPA with recent production numbers. EPA also noted that if the canneries sample early in the month and exceed the monthly average limitation, they are free to conduct additional sampling that will, presumably, bring the average down and avoid an exceedance.

Nutrients (Total Nitrogen and Total Phosphorus):

- EPA revised the previous derivation for these limitations and added concentration limitations as well as mass loading limitations. The monitoring frequency was reduced to once/month.
- Nutrient limitations were a subject of prolonged discussion, and were subsequently discussed in follow up emails and the teleconference. We pointed out that: [1] the original derivation was based on a wasteload transport model and not a dilution model, and [2] the concentration limitations, and in some cases the mass load limitations, proposed by EPA would result in immediate violations by both canneries.
- After additional discussion EPA has proposed to leave the limitations as in the current permit, with no concentration limitations. However, it is likely that they will require a special condition to re-evaluate the nutrient mixing zone based on new data and better models that have become available since the original permit and validation studies done in the mid 1990's. We will provide EPA with a brief synopsis of the basis of the original permit limitations and suggestions for the new evaluation procedures.

Ammonia:

- EPA revised the derivation of the limitations for ammonia. Existing limitations are based on the dilution required for compliance with acute concentrations. However, the chronic criterion was applied by EPA. This resulted in limitations that are much lower than the existing limitations. The monitoring frequency was reduced to once/month, monthly average limitations were added in addition to the daily maximum limitations, and mass loading limits were added as well as concentration limitations.
- Everyone recognized that the canneries cannot comply with the proposed limitations. The derivation of the existing limitations was, to some extent, apparently incorrectly

done. A mixing zone for chronic levels can be extended based on the available dilution and assimilative capacity of the receiving water. ASEPA will have to approve such a mixing zone. It was also noted that the mass loading limitations were based on historic flows rather than the hydraulic capacity of the treatment facilities. This effectively and arbitrarily “limits production”. We requested that EPA use the design flows to calculate mass limitations if they are to be included in the permit.

- The canneries will petition ASEPA for a mixing zone to account for chronic levels of ammonia. **We need to provide a request to ASEPA as soon as possible, and even before that we need to solicit approval-in-principle so the permit renewal process can move ahead.**

Metals:

- EPA recalculated the limitations for copper, zinc, and mercury relative to the existing permit (Cu and Zn) and our mixing zone application (Hg). Existing limitations are based on the dilution required for compliance. EPA’s recalculation scheme was somewhat different and resulted in higher daily maximum limits for all metals. However, monthly average limitations were added in addition to the daily maximum limitations, and are lower than the previous permit. The monitoring frequency was increased back to once/month (from semi-annual), and mass loading limits were added as in addition to the concentration limitations.
- We discussed the calculation method and, recognizing that EPA indicates a reasonable potential value higher than the proposed limitations, we discussed the possibility of recalculating the dilution required and modifying the mixing zones for Cu and Zn. However, it is clear to us that the high values for Cu (and possibly Zn) in the record are laboratory artifacts. These occasional exceedances do not appear to be real. We indicated that if the monitoring is done every six months rather than monthly we would do the sampling and analysis through our lab and would get higher quality data and would not expect to see any exceedances of the permit limitations as stated in the pre-draft permit. We would not need to recalculate/redefine the mixing zone. We discussed the situation of monthly average limitations and noted that the canneries, simply because of logistics of shipping and the time required to do metals analysis, probably can not examine results and then do additional samples to meet monthly averages if the initial sample is higher than the monthly average limitation. Therefore, we need to be comfortable with the limitations. We also noted that the mass limitations should be based on design flow and not the historic flows for the same reasons stated above.
- EPA agreed that the semi-annual sampling would be acceptable and will consider using mass loading based on design flows. **We will double check the metals record to verify that the currently proposed limit (particularly the monthly average for zinc) will be sufficient to avoid exceedances.**

Acute Toxicity:

- EPA proposed a “pass/fail” limitation with “fail” triggering a TIE/TRE.

- We discussed this at length and indicated that the canneries would obviously fail on the first test and then have to do a study that has essentially been done and the outcome of which we already know. We suggested a mixing zone for acute toxicity. EPA has stated that if we can demonstrate a definitive link between toxicity and the toxics already controlled by effluent limitations we can drop the acute bioassay testing completely.
- In our follow-up discussion **we agreed to prepare a document that will clearly demonstrate the link between ammonia and acute toxicity** and EPA will remove acute toxicity testing from the permit. This also removes the requirement for TIE/TRE studies.

Chronic Toxicity:

- In the pre-draft permit EPA included chronic toxicity tests with triggers for accelerated testing and a TIE/TRE program.
- It is obvious that the canneries will (almost certainly) fail the testing, and the subsequent accelerated testing, simply based on the acute results. The discussion was similar to that for the acute testing. EPA noted that we can alternatively request a dilution series to determine if additional studies or actions are required, similar to the acute testing previously done.
- In our follow-up discussion EPA indicated they will remove the chronic testing as an effluent limitation and make it a special study. The study will be based on semi-annual testing and will include range-finding tests and subsequent tests to determine the level of chronic toxicity. If the data indicate we can show correlation between the chronic toxicity and parameters with effluent limitations, then we will be able to drop the chronic bioassays in the future. This also removes the requirement for TIE/TRE studies.

Other Effluent Limitation Issues:

A number of issues related to the effluent limitations were discussed as follows:

- Flow is not limited in the permit. We are not sure if this will remain the case or if, based on our request to use design flow to calculate mass limits, flow will be included as is currently the case. We did request that the currently permitted flows, which represent the hydraulic capacity of the treatment systems, be used for the calculation of mass loading limits for toxics (ammonia and metals).
- The permit does not indicate that the toxicity testing is to be done on the combined effluent; however the fact sheet indicates that this is the case and EPA indicated that the permit will reflect combined sampling.
- We discussed the problems with holding times for the bioassay samples and why it was not possible to meet holding times. **EPA has requested that we document this and request a waiver as we have done in the past.** It was noted that we will change labs for the chronic test, which may improve holding times. The test being required will have to be done on the Pacific Coast.
- We discussed the problems with IDOD and DDOD in the effluent and the effect on bioassay testing. We noted that we had developed a protocol for the lab to handle

this issue. **EPA has asked for a copy of this protocol, which we will provide.** The issue will not be as critical for the chronic test since they take a shorter time and do not have a renewal phase. IDOD will still be an issue that the lab has to address.

2. Monitoring and Reporting

There were a few points discussed as listed below. Note that much of the pre-draft permit concerning bioassays and TIE/TRE studies will change based on the points described above.

- There is an attachment required for the DMRs that needs to be developed in a standard format (see section II.A.3 in the pre-draft permit).
- The DMRs will be due quarterly 15 days following the last month of the quarter. Depending on the timing of the metals analysis, to be done semi-annually at the time of the receiving water monitoring, the data may not be available at the due date. We need to address this with EPA, and it should be addressed in the permit. Possibly these data could be reported on separately generated six-month DMR forms?
- The canneries will need to generate/update laboratory QA manuals for the in house analyses (to be reviewed and updated annually). This is to be completed within 90 days of the effective date of the permit (EDP).
- Provisions relating to acute toxicity will no longer be included.
- The provision relating to chronic toxicity testing will be changed based on the discussion above. The only issue may be the reporting of the results with the DMR for the month in which the test is done. Depending on the timing of the bioassay test, presumably to be done semi-annually at the time of the receiving water monitoring, the data may not be available at the due date. We need to address this with EPA, and it should be addressed in the permit. Possibly these data could be reported on separately generated six-month DMR forms?

3. BMPs and Pollution Prevention

Pollution Prevention Program (BMP Plan):

- The permit requires the development and implementation of a BMP plan within 90 days of the EDP. This is a more-or-less standard permit requirement.
- It was noted that the canneries have done this under previous permits and can simply update the existing documents.
- This does not appear to require any further consideration until the new permit is issued.

Toxic Pollutant Minimization Program:

- The pre-draft permit requires a study and implementation within six months of the EDP. The parameters include copper, zinc, and mercury.

- We noted that the canneries already did a study for Cu and Zn, with the conclusion that there was no practicable way of reducing the concentrations since they were obviously related to machinery, plumbing, and hardware used in the plant and not a result of any process additions. We suggested that only mercury needed to be addressed, and a similar study could be done. We also requested a longer time period (1 year from EDP) so that we could do the study concurrently with our receiving water quality monitoring trips¹.
- EPA generally appeared to agree with addressing only mercury and, with agreement from ASEPA, that a one year time frame was reasonable. **EPA has asked that we forward a copy of the previous report in the event they can not locate it.**
 - **After getting back to the office I determined that only COS did such a study, it was done in 1995, and the analysis was not as complete as desired. The laboratory analysis techniques have improved over time. I suspect the canneries will have to sample all three metals. Additional costs will be for analysis only since sampling will be done at the same time for all parameters.**

4. Receiving Water Monitoring Program:

We requested some minor clarifications and a few revisions to be consistent with the modified program we are now conducting:

- We asked for clarification of the near-bottom sample location and described our current approach (samples at 3, 60, and 120 feet). Clarification will be provided in the draft permit.
- We questioned the need and usefulness for chlorophyll-a profiles and discussed the usefulness of such data with the technology available. We noted that such profiles were not included in the description in the Fact Sheet. EPA agreed that chlorophyll-a profiles are not useful, and would not be required.
- We questioned the need and usefulness for pH profiles in marine waters and note that, based on agreement with EPA and ASEPA we had stopped these measurements. EPA agreed that pH profiles are not really meaningful, and would not be required.
- We discussed the use of light penetration measurements instead of turbidity and chlorophyll-a as we are currently doing. ASEPA supported our discussion. EPA appears to agree that this is a reasonable request. Although this generates more data in the field it avoids problems with holding times, shipping, on-site sample processing, and difficulties with low level measurements. It also more directly addresses water quality assessment and water quality standards.

¹ EPA asked if the canneries intended to keep using us (gdc) to do the studies. We responded that we believed this to be the case based on our current arrangements.